

ABSTRACT

Disclosed are components covered with a protective coating for use in a molten metal bath (or comparable environment) and devices including such components. The protective coating is preferably a ceramic sleeve adhered to a non-coated component by cement. A component with the protective coating is more resistant to degradation in molten metal than is the component without the coating, and may be manufactured by the process of (a) placing the protective coating over the non-coated component, and (b) injecting cement into the space between the non-coated component and protective coating, wherein at least some of the cement is injected through a passage in either the non-coated component or the protective coating.